

WHAT IS CLAIMED IS:

1. An illumination system, comprising:
  - at least one channel defined by a plurality of wall surfaces and a back surface;
  - a translucent diffuser extending over the channel; and
  - a plurality of light emitting diode (LED) modules disposed within the channel and attached to at least one of the channel surfaces, the LED modules being electrically connected to one another in parallel, each of the LED modules comprising:
    - a plurality of LEDs;
    - a circuit board comprising a dielectric portion, the LEDs disposed on a first side of the dielectric portion and arranged such that the plurality of LEDs are electrically connected in series; and
    - a heat conductive metal on a second side of the dielectric portion, which heat conductive metal draws LED-generated heat from the first side for dissipation in the channel.